a review of pension regulatory

Pension plans have been the subject of unprecedented attention over the past few years, following the dramatic deterioration of funded status in the years 2000–2002. One positive result has been an impetus to reevaluate existing practices in investing, funding, and reporting. Two areas of review in particular have culminated in recent months, with the final approval of revised regulations for pension funding and financial reporting. We provide a brief discussion and analysis of these developments.

What Aspects of Pension Finance Do the New Rules Affect?

There are two separate developments:

- One impacts potential **valuation for funding purposes**, (i.e., cash contributions) by changing a key discount rate from a 30-year Treasury-linked rate to a rate based on investment-grade corporate bonds. The new rate will be higher, making liabilities look smaller, and pension plans look better funded.
- Another impacts **financial accounting for pensions** (i.e., pension expense) by requiring greater disclosure.

JPMorgan Fleming
Asset Management

(A) Funding Changes

What Are the Minimum Funding Rules?[1]

Funding requirements are governed by ERISA, the IRS and the PBGC, with a web of rules designed to ensure adequate funding while limiting tax deductions to the plan sponsor. We focus here on the **minimum contribution requirements**, as these are of greatest concern to most plan sponsors.

The baseline contribution for most pension plans in a given year is equal to **normal cost plus amortization** of costs related to unfunded actuarial liabilities.[2] Unfunded liabilities may arise due to changes in the liability (such as benefit increases) or in the assumptions used for valuation purposes (such as mortality tables).

Plans whose assets fall below 80% of the "current liability" (valued with a specific discount rate, discussed below) are subject to **additional funding charges** (AFC) based on the level of underfunding.[3] Plans falling between 80% and 90% funded to the current liability *may* be subject to such charges if they were also less than 90% funded in the previous two years. These additional funding charges are made **in addition to the baseline contribution**.

As an alternative to the baseline contribution (plus additional funding charges), in any given year a plan may choose to contribute the **amount that plan assets fall short of 90% of the "current liability."** The **"current liability" is therefore an important determinant of contributions under either method.**

The Current Liability Discount Rate

Due to the prominence of the current liability in minimum funding rules, the **discount rate used to value the current liability is a key variable** for contribution calculations. A relatively low discount rate causes higher contributions (due to a higher liability value, and therefore lower funded status), while a relatively high rate leads to lower contributions, all other things being equal. We discuss the original and revised current liability discount rate methodologies on the following page.

changes

funding

ORIGINAL RULES: Prior to recent changes, the current liability had been discounted with a proportion (ranging from 90% to 105%) of a smoothed, four-year weighted average of 30-year Treasury yields.[4] Most sponsors chose to use the 105% proportion in order to make liabilities, and resulting contribution requirements, smaller.

TEMPORARY RELIEF: Declines in the 30-year Treasury yield (and discontinuance of the 30-year Treasury) during an extremely difficult market environment prompted Congress to enact a measure of relief, via the Employee Growth and Tax Relief Reconciliation Act of 2001 (EGTRRA), which took effect in 2002. The Act all owed for plan sponsors to generate a higher discount rate by using a larger proportion (up to 120%) of the four-year weighted 30-year Treasury in their calculation of pension liabilities for contribution purposes. This funding relief applied specifically to the plan years 2002 and 2003, expired in December 2003.

In the absence of Congressional action in 2004, the old rule (with up to 105% of the smoothed and weighted 30-year rate) would have applied once again. This would have caused a sudden drop in the discount rate at a time when many plan sponsors were struggling to regain ground. This fragile environment (and continued lack of 30-year Treasury issuance) prompted the approval of the most recent legislation.

NEW RULE: **The 2004 Pension Funding Equity Act**, approved in April 2004, states that the current liability should be discounted with a four-year weighted average of a **long-term, high-quality corporate bond rate**. The rate is itself a composite of three different corporate bond indices, where the most recent yields are accorded the highest weight.[5] Plan sponsors may use a proportion, ranging from 90% to 100%, of this weighted-average rate to derive the final discount rate; we expect most sponsors to use the 100% proportion. **This legislation is temporary with a new rule intended to be in place after December 2005**.

How Much Relief Does the New Rate Provide?

In Table 1, we present a comparative analysis of the discount rates and associated effects of the original, temporary (EGTRRA), and new (Pension Funding Equity Act) rules. For example, as of December 31, 2003 (for plan year 2004), the 4-year weighted average 30-year Treasury yield (not shown) was 5.26%, resulting in a **5.51%** current liability rate given the original 105% multiplier.[6] The smoothed and weighted corporate composite index yield, and new current liability rate, was **6.55%**. For a 10-year duration liability, this increase of 104 basis points (from 5.51% to 6.55%) translates into an approximate **10.4% decrease in the current liability valuation**.[7] This means that a plan that appeared to be 80% funded under the “old” rules would now appear to be 89% funded instead. For 2004, the new regulation also provides even greater relief than the temporary EGTRRA rules (which would have produced an effective discount rate of 6.30%). Thus the extended relief provided through the change in discount rate methodology has the intended effect of buoying funded status for contribution purposes.

How Sustainable is the “Relief”?

If rates were to stay at current levels (as of June 2004), with a year-end market rate of 5.34% for the 30-year Treasury and 6.12% for the long-term corporate composite, **this year (2004) would mark the peak of the relief gained from the new regulations**. This is because the 4-year smoothed rate of 6.55% this year encompasses rates from the years 2000, 2001, 2002, and 2003 — and the year **2000 was a high-rate year, especially for corporate spreads**. For example, the spread between long-term corporate rates and the 30-year Treasury was 190bp in the year 2000, versus just over 70bp in June 2004.[8] When the year 2000 “rolls off” of the calculation next year, the smoothed and weighted rates drop, and the corporate and Treasury-based rates converge to a more moderate spread. If rates were to remain stable, we would ultimately expect a relative improvement of 5% with the new vs. original rules (i.e., a 5% relative decrease in the liability value).

This smoothing effect means that **even if rates were to rise, we would expect a dip in the effective current liability rate** for plan year 2005. For example (not shown here), if we saw a parallel rise of 200bp in market rates from year-end 2003 through year-end 2005, we estimate that the new regulatory rate would drop to approximately 6.20% for plan year 2005 before starting to rise again.[9] This coincides with the deadline for new legislation to take the place of the Pension Funding Equity Act.

What are the Implications for Pension Plans?

While the Pension Funding Equity Act offers funding relief, it is only a temporary solution. Tweaking discount rates does *not* change the value of the benefit payments for which sponsors are responsible. Most sponsors will have to pay eventually, and the question becomes whether to pay now or pay later. This legislation allows sponsors to take the “pay later” option, in favor of preserving corporate cash or investing elsewhere. However, companies with adequate cash flow may find it prudent to pay now, as contributions made today have the greater benefit of compounding over time — preventing further deterioration in funded status.

estimated impact of pension funding equity act

Rates at End of Year:	2002	2003	2004 (Est*)	2005 (Est*)	If Rates
For Plan Year (PY) Ending:	**2003**	**2004**	**2005**	**2006**	Stabilize*
End-of-Year Rate*					
30-yr Treasury[a]	4.92%	5.07%	5.34%	5.34% ...	5.34%
Corporate High Quality Rate[b]	5.90%	5.64%	6.12%	6.12% ...	6.12%
Current Liability Rate (Smoothed & Weighted)[c]					
Original Regulations[d]	5.81%	5.51%	5.43%	5.47% ...	5.61%
EGTRRA Relief (PY 2002, 03)[e]	**6.65%**	6.30%	6.20%	6.26% ...	6.41%
New Regulations (PY 2004, 05)[f]	n/a	**6.55%**	**6.16%**	**6.06% ...**	**6.12%**
New Regulations vs. EGTRRA Relief					
% Change in Liability Value:[g]		-3%	0%	2%	3%
New Regulations vs. Original Regulations					
% Change in Liability Value:[h]		**-10%**	**-7%**	**-6%**	**-5%**
80% Original Funded Ratio Changes to:		**89%**	**86%**	**85%**	**84%**
100% Original Funded Ratio Changes to:		**112%**	**108%**	**106%**	**105%**

* For illustrative purposes only, we assume here that rates do not change from June 1, 2004 on.

a. Treasury rate closest to 30-year maturity since discontinuation of 30-year issuance.

b. Simple average of the three rates to be used by the U.S. Treasury Dept. to derive the composite high-quality rate: Citigroup High Grade Corp AAA/AA 10+ yrs, Merrill Lynch US Corp AA-AAA 10+ yrs, and Lehman Bros. US A Long Credit.

c. For all scenarios, we assume the highest permissible multiple of the appropriate 4-year weighted average rate.

d. "Original" regulations were based on 105% of the 4-year weighted average 30-year Treasury. (Sample average annual 30-year Treasury rates: 2000: 6.01%, 2001: 5.49%, 2002: 5.33%, 2003: 4.91%, 2004: 5.19%, assume 2005-on: 5.34%).

e. EGTRRA relief expired in 2003. Based on 120% rather than 105% of the 4-year weighted average 30-year Treasury.

f. Pension Funding Equity Act approved in April-04 for plan years 2004 and 2005. Based on 100% of a 4-year weighted average of the composite high-quality corporate yield, to be announced monthly by the U.S. Treasury Department. (Sample averages: 2000: 7.90%, 2001: 7.08%, 2002: 6.71%, 2003: 5.78%, 2004: 5.93%, assume 2005-on: 6.12%).

g. Comparing liability value using "new regulations" vs. "EGTRRA" current liability rate. Assumes 10-duration liability.

h. Comparing liability value using "new regulations" vs. "original regulations" current liability rate. Assumes 10-duration liability.

Source: JPMorgan Fleming, Lehman Brothers, Bloomberg, Internal Revenue Service accounting

(B) Accounting Changes

An entirely separate framework, dictated by the Financial Accounting Standards Board (FASB), governs the **annual accounting and disclosure** of pension plans (including pension expense, the pension-related cost charged to corporate earnings for a given year).

Under existing statements FAS 87 and 132, the following pension-related disclosures have been required to appear in the *notes* to the financial statements:[10]

- Development of annual pension expense, including service and interest costs, expected return on assets, and amortization of gains and losses
- Market value of assets (MVA, beginning of year and end of year, with detail on changes)
- Projected benefit obligation (PBO, beginning of year and end of year, with detail on changes)
- Accumulated benefit obligation (ABO), *only* for those plans where MVA falls below ABO
- Reconciliation of funded status
- Discount rate assumption
- Expected return on assets assumption
- Salary growth rate assumption

New Disclosure Requirements

In December 2003, FASB announced the following additional disclosure requirements, to be implemented for plan years ending after Dec. 15, 2003, unless otherwise noted.[11] All public and non-public companies must now additionally provide:

Asset Strategy

- The percent allocation to the following four categories: equity securities, debt securities, real estate, and other, with additional detail "encouraged," but not required
- Return expectations for plan assets in aggregate, as well as a narrative description of the basis for determining expected returns, including general approach, use of historical returns, etc.
- Narrative description of investment strategy and target asset allocation (if applicable)

Liability Value

- Accumulated Benefit Obligation (ABO) total value — for *all* plans, regardless of funded status

Cash Flows

- Expected contributions for the next fiscal year
- Expected benefit payments for the next five years (to be implemented in 2004)

Interim Reporting

- Components of pension expense and adjustments to contribution expectations are now also required to be disclosed in interim reporting periods.

What Are the Implications of the New Requirements?

While the new disclosures are far from comprehensive (versus the many additional disclosures that had been under consideration), FASB reportedly aimed to improve disclosures while placing a high priority on ease of implementation; thus the new disclosures are not too burdensome or technical.

***Asset*-related** disclosures will give the public a more robust understanding of the **investment strategy**. A narrative of the thinking behind the development of return assumptions coupled with target allocations will allow the public to better understand whether expected return on plan assets is reasonable. It will be interesting to see if the new requirements surrounding asset allocation *and* asset return assumptions will encourage sponsors to reduce their overall expected rate of return assumption, and whether increased transparency leads to either more tailored investment strategies, or to more similar allocations across peer groups.

***Liability*-related** disclosures allow for a more meaningful assessment of the pension's impact upon the plan sponsor. The ABO provides a more accurate estimation of the plans' actual current obligation, since it (unlike the PBO) does not include the effect of future salary increases. This measure is more useful for debt-related analysis, and its disclosure will also allow better prediction of possible charges to owners' equity (which can occur when assets fall below the ABO). These disclosures will be especially meaningful for the companies sponsoring plans which are very large relative to the size of the company, for the performance of these plans potentially exercises much more influence upon corporate variables.

Further, since the PBO (but not the ABO) includes projections of future salary increases for plan participants, the **ratio of the ABO/PBO** gives an indication of the relative maturity of the plan (e.g., a high ABO/PBO ratio indicates a mature plan).

***Cash flow*-related** disclosures give an indication of liquidity needs — for both the plan sponsor (in terms of contribution requirements) and for the plan (benefit payouts).

While additional disclosures (such as liability duration) would have been useful, the new requirements are still a positive development for both the investor and plan sponsor communities. These disclosures should not only improve analysts' understanding of plans' status, but should encourage companies to better consider liability characteristics when developing investment policy and strategy.

Summary

The stresses imposed upon pension plan sponsors beginning in the year 2000 prompted the review of some Fundamental regulatory frameworks, with major developments on the funding and accounting fronts over the past several months. The Pension Funding Equity Act provides a measure of contribution relief, softening the blow of contribution requirements, but that relief is expected to peak this year. Additionally, plan sponsors are now subject to more rigorous accounting disclosures, which we expect to give more clarity to pension funding issues and reinforce investment policy discipline. ○○○

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The Strategic Investment Advisory Group of JPMorgan Fleming Asset Management works with institutional clients to address investment policy and plan management issues.

notes

1. The description of funding rules provided here is for general discussion purposes only. Each plan will face specific requirements that are also influenced by prior contribution history, smoothing methods, plan structure, types of charges and credits, etc. Please consult your actuary for a projection of contribution requirements.

2. Normal cost is the growth in liability due to one additional year of service provided by active employees. For this baseline contribution calculation, the liability is valued with a stable discount rate determined by the plan (*not* the "current liability" rate).

3. The proportion of the deficit that must be contributed depends upon the level of underfunding, as described in IRC sec.412(l)(4). Specifically, where (assets/current liability) = CLFR, the "deficit reduction contribution" (DRC) = [30% – 40% * (CLFR – 60%)] * (100% – CLFR). The additional funding charges required in a given year would then be the excess of the DRC over the "baseline" contribution.

4. As written in U.S. Internal Revenue Code and ERISA. This weighted average is not of end-of-year rates, but of average monthly rates over each year. See footnote 5 for the exact formula.

5. The rate is calculated as follows: 40% (average composite yield from previous year) + 30% (average composite yield from 2 years ago) + 20% (average composite yield from 3 years ago) + 10% (average composite yield from 4 years ago). This weighting scheme is the same as that used to smooth and weight the average 30-year Treasury rates in the original regulations. The new composite rate assumed to be an average of Citigroup High-Grade Corp AAA/AA 10+ yr. index, Merrill Lynch US Corp AA-AAA 10+ yr. index, and Lehman Bros. USA Long Credit index.

6. Note that this weighted average is not of end-of-year rates, but of average monthly rates over each year.

7. 10-year duration* 104 bp = 10.4%, where duration measures the sensitivity to changes in discount rate.

8. December 2000: 30-year Treasury = 6.01%, Long-term corporate composite = 7.90%. June 2004: 30-year Treasury = 5.19%, Long-term corporate composite = 5.93%. Source: Lehman Brothers and JPMorgan Fleming.

9. JPMorgan Fleming estimates for illustrative purposes only, subject to change without notice.

10. Other specific disclosures and accounting values are detailed in the FAS statements.

11. Please see www.fasb.org for the News Release, FAQ, and full text of Revised Statement 132.